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INDIANA FARMER & GARDENER.

Indianapolis, Saturday, July 26, 1845.

Agricultural Societies.

A law was passed, in 1836, we believe, by the Legislature of Indiana for the organization of a State Board of Agriculture, with provisions for the establishment of county societies. Many county societies were formed, and for some years flourished; few of them, we believe, exist now. We hope that the day has come for them to revive; and, that the experience of the past may not be lost, it is well to record the reasons why these county societies declined.

1. Just after their birth, came on the fatal years of fictitious prosperity; when every man expected a rail road on one side of his farm and a canal on the other—and when every body was about to be exceedingly rich; not by legitimate business; not by producing wealth; but by the *rise of property*. Now the wealth of a farming community is always to arise from the products of the farm. Whatever withdraws attention from assiduous cultivation, or plants the hope of gain in other sources than in the herds, the dairy, the grain and the grass field, will, eventually, ensure disappointment and even poverty, as many of our farmers can testify. It would be difficult for those who had not seen it, to imagine the fervent, sanguine, exulting, state of mind with which the whole community, at the time we speak of, looked for the wealth. Farms were to quadruple in value; pork was be to cashed at enormous prices; grain and grass, stock and fruit, were to swell the golden tide; and, for once, the world was to see great riches from little labor. Carelessness, waste, rashness, and incredible presumption were the result. Societies for the promotion of a careful and patient cultivation of the soil could not long be thought worthy of attention in a community which expected to be rich by a dexterous bargain, by one lucky speculation, by town lots, and shares, and that mysterious humbug—the rise of property.

2. Succeeding such days came the opposite extreme. Every body was poor and expected to be poorer. There was no money and no market. Hogs were hardly saleable, grain a drug, and all produce unavailable.—Nothing was brisk but debt and debt collecting. Men were discouraged. Said they, "if one can sell nothing, there is no use in raising anything; twenty bushels an acre is as good as forty, when one can't sell or use it." Schools languished, public spirit died, business was totally deranged, and Agricultu-

ral Societies became extinct with the downfall of other useful institutions.

3. There were some things in the management of the societies which embarrassed them independently of these other causes. There was too much talk and pretension—wind work; the offices were taken for the honor—patient endurance of drudgery, which somebody must bear, was *shirked* off.—Men took little pains *between* the meetings; every thing was to be done at the time of meeting; and, of course, half done. This led to dissatisfaction. The mistakes of carelessness were attributed to partiality or predjudice. Some dropped off; others relaxed; and, when the excitement was gone, few cared to take the dull but real and necessary business.

4. Notwithstanding all these things, the county societies did a great deal of good. A skillful farmer told me, that in Madison county, the place of his residence, there was hardly a considerable farmer in the county who did not try a few acres, at least, to see what he *could do;* and even many renters exhibited specimens of fine cultivation. More attention was paid to every part of the farm; and, for a time, every thing felt the impulse.

A few words to those who may embark again in this good cause.

1. It is best to begin as you can hold out. A great meeting, a vast roll of bye-laws, a regiment of officers, a parade of speeches, these make a fine meeting, and that's all.—Let a few staunch friends to improvement put their heads and hands together, without show or noise; begin at the little end, and hold fast what is gained.

2. In chosing officers, societies almost invariably steer upon one rock on which thousands have split. There is a desire to put great men into offices, to get their influence. In a mere public meeting of a day, this is well enough; but in a society which is to exist by efficient labor, it is suicide. Such men like to be puffed and published as Presidents, Chairmen, &c. &c., but that ends the matter. They go away and are not seen again till the next annual meeting, when, lo! a resurrection takes place; and they flame again, a whole year's zeal exhibited in one day. It is best to select officers, who are well broken, of a good strain of blood, and who pull steadily, on hard ground, in the mud, over bridging, or upon turnpikes. In this way we may not have quite so large a shew, but we shall have a steadily growing and efficient society.

3. In the award of premiums, more or less of dissatisfaction will always be felt.—A man who has worked a whole year for a premium cannot be expected to lose it without some pain. Premiums should be awarded with great care, with scrupulous impartiality, and every effort made by the leading, substantial farmers to soothe and keep down every thing like bitterness and faction, in consequence of disappointment.

4. It is *indispensable* that Agricultural papers should go hand in hand with Agricultural Societies. We will venture to say, that no society will long exist prosperously, which does not have a reading membership; and that, a society can hardly fail to prosper if its members are regular readers of Agricultural papers. This may savor of a desire to attract notice to the paper which we conduct. So we should like to have it spread among the farmers, for that is just what it is published for, and if we did not think it fit for that purpose, we should be ashamed to continue editing it. But no matter what the paper is, (Ohio Cultivator, Indiana Cultivator, Western Cultivator, Prairie Farmer, Western Farmer and Gardener, or Indiana Farmer and Gardener) *some one* of them ought to be freely circulated wherever an Agricultural Society is expected to flourish.

Farmers Library and Monthly Jour. of Agric.

We have received the first number, from the press of Greely & McElrath, N. Y. of this periodical. We regard it as emphatically admirable, whether regarded in respect to its original matter, its reprints, or its mechanical execution. Every farmer who can afford five dollars for a work which will be a Library indeed, should send for this work. We shall regard the liberal support of this work as evidence that Agriculture in the United States has become a science as well as an art.

Blading and Topping Corn.

No one performs these operations for the benefit of the ear, but to obtain fodder; and it is then justified on the ground that the corn is not harmed by it. The sap drawn from the root does not flow strait up into the ear and kernel, but into the *leaves* or blades. The carbonic acid of the crude sap is decomposed, oxygen is given off and carbon remains in the form of starch, sugar, gum, &c. &c. according to the nature of the plant.—When sap has by exposure to light undergone this change it is said to be *elaborated*.

It is only now that the sap, passing from the upper side of the leaf to a set of vessels in the under side, is reconveyed to the stem, begins to descend, and is distributed to various parts of the plant, affording nourishment to all. But when the fruit of every plant is maturing it draws to itself a large part of the prepared sap, which, when it has entered the kernel is still farther elaborated and made to produce the peculiar qualities of the fruit whether corn or wheat, apple or pear. It is plain from this explanation that a plant stripped of its leaves is like a chemist robbed of his laboratory, or like a man without lungs.

If corn is needed for fodder, let it be cut close to the ground, when the corn has glazed. The grain will go on ripening and be as heavy and as good as if left to stand, and the stalk will afford excellent food for cattle. Sheep are fond of corn thus cured, and will winter very well upon it. In husking out the corn, the husk should be left on the stalk for fodder.

For the Indiana Farmer and Gardener.

Decay of Cucumber Vines.

Mr. Editor:—Please inform me how I can prevent the decay of cucumber vines.—Mine do well until they begin to bear. The difficulty is not at the root; it begins in one branch of a vine, then another and so on until all are dead. I have examined and can find no cause of the evil.

CHARLES GRANT.

There are five enemies of the vine which have come under our notice.

1. The striped yellow bug, which is only to be feared while the plants are small; offensive odors, turpentine, poppies, &c., have been recommended and employed with partial benefit. A box about a foot square, six inches high, covered with millinet is a *sure* protection and the boxes last for years if taken care of.

2. A large black stinking bug, at a later period, infests the vine; but squash and mellon vines more than the cucumber; and they are fonder of the fruit than of the leaf or stem. They may be found often burrowed at the root, but usually pasturing on the fruit.

3. There is a grub which attacks the vine at, or just beneath the surface of the ground, and gnaws the stem wholly or partially in two. It is to be removed by hand, and leached ashes may be placed around the vine.

4. There is a minute insect which attacks the under side of the leaf, and, after a time, causes it to wilt and sometimes to die. It is difficult to apply a remedy which will not cost more than the vines are worth. If a wash of any kind is applied, each particular leaf will have to be raised by hand.

5. There is a worm which eats into the stem, near the extremities and works its way downward, and as fast as it goes the vine wilts and dies. Follow down with your knife, slitting open the stem until the worm is found and remove him.

Pruning Grape Vines.

All know that after the sap begins to flow in the spring a vine, if cut, will bleed. It seems that at this early period of its developement the sap vessels have no power of contraction. Many suppose that the same state of things continues throughout the growing season, and are afraid to cut their vines. But after the vine has begun to grow freely (when the leaves, for example, are as large as the palm of one's hand,) a wound very soon contracts, bleeds little or none, and heals over as in a tree. Any pruning which is necessary upon the old wound may, therefore, be fearlessly performed.

Some inexpert cultivators, in order to let the sun fall upon the grapes, pluck off the leaves; hoping thus, to secure sweeter grapes. This is the very way to have acid fruit.—Where is the sugar prepared for the cluster but in these very leaves which are taken off? Without leaves, the sap which flows into the

cluster, has undergone but imperfectly those chemical changes on which the fruit depends. Every leaf in the neighborhood of the fruit is precious.

Slobbering in Horses.

Can any of our readers inform us of the cause of slobbering in horses when put upon clover pasture? Is it the clover, or a weed? If an animal is turned loose upon clover will he get over druling after becoming used to the food, or will it continue as long as he feeds upon it? What is the effect of it upon the horse, good or bad, or neither? Will some one enlighten us; and if there is anything which they don't know and we *do*, we will "do as much for them."

Mildew on Grapes.

Many permit the fruit of the vines to perish before their eyes from the ravages of mildew, ignorant that an effectual remedy is within their reach. It is simply to dust the branches with flour of sulphur. It is best done while the dew is on.

When vines are trained upon the sides of a house or fence, it is well to whitewash the surfaces on which they are fastened with a wash in which flour of sulphur has been largely mixed.

It is recommended by some cultivators to employ such a whitewash for the *wood* of the vine, covering all the main stems with it; but all these methods result in the one thing—the application of sulphur as a remedy for mildew.

Hackleman Wheat.

Having heard of this wheat I enquired after its history and qualities. The Brookville American, thus answers our interrogatories. We hope, before long, to visit Wayne county, and shall embrace the opportunity to procure some seed. If any of our farmers would lik to try this wheat, we will cheerfully aid in getting it for them.

"In our previous notice of the Hackleman wheat we were not sufficiently understood. The wheat known in this neighborhood as the Hackleman (or Alabama) wheat, was introduced here by Judge Hackleman in the year 1836. This was the first that was known of it either in Ohio or Indiana. In the summer of 1836, the Judge was travelling in the South, and being a good practical farmer, who always sees and improves upon everything worthy of his attention, saw a small quantity of wheat different in appearance from the usual crop. He obtained from a woman a small quantity, which he brought home in his saddle-bags, from which all the Wheat of this kind in this State and Ohio has been obtained.

"The Hackleman wheat has many qualities which make it superior to any other wheat in this country. It ripens from ten to fifteen days earlier than any other wheat, and consequently has yet never been known to be affected in the least by rust, which so often proves fatal to other wheat. It averages about sixty-five pounds to the measured bushel, being on the average three pounds heavier than the *red-chaff bearded*,—five pounds heavier than the common,—and from five to ten pounds heavier than the *white wheat*. The Hackleman wheat is bald, with the exception of a few long beards on the point of the head—the wheat is rather dark, and flours well.

"This year this wheat did not do as well, probably, as other wheat, it having been injured materially by late frosts after it headed and jointed, from being earlier than other wheat. But in ordinary seasons there has not been this objection.

"Such a demand has there been for this wheat for seed, that little or none found its way to the Cincinnati market until probably last fall, and then in small quantities. For the last year it has been selling here from fifty to a hundred per cent. higher than the common wheat, for seed. Of late, however, we see it has been favorably noticed in the Cincinnati papers.

"Judge Hackleman called it Alabama wheat, although he did not obtain the seed in that State. And it is due, that the farmers and millers should call it *Hackleman wheat*. Should distant friends wish it, we believe any quantity can now be had in this region. If it should prove to be no better, it will be well for farmers to sow a part of this kind, as it will ripen sooner, and thereby give farmers a longer wheat harvest."

☞ Our readers will recognize with pleasure the signature (F.) of Mr. Flower, in article "Flock of St. Maries." Mr. Flower may be ranked as among the very first, if not the first, in knowledge and practical skill in matters pertaining to sheep husbandry.

Potato Disease.

Our correspondent M., was promised in our last number, a description of the potato disease. We have collected a series of extracts which will comprise about all that is known on the subject. Since our last number we have seen exposed for sale in this town very badly diseased potatoes and we warn those purchasing to be careful what they buy.

"*The potato rot.*—The first case of this disease which came to our observation happened three years ago. In a quantity of potatoes brought from Novia Scotia, about 10 per cent. of them were found to be unsound; some showing, on the removal of the skin after cooking, a dry black spot, covering frequently one-half of the potato, and often leaving the other half perfectly good and mealy; some of them, on breaking open, emitting a strong disagreeable smell, and showing the color of the potato to have changed from the natural white to a dingy yellow. These last specimens of the disease were in different stages of progress, like those having the dry black spots; but they differed from these last, by affecting uniformly the entire tuber. In some of them the color had but slightly changed; and though the smell was perceived somewhat, yet the potato was eatable. In others, the smell had become so offensive, that, although it could not be discovered till the potato was cut or broken, it was immediately thrown away."—*Newburyport Mass. Her'd.*

The presence of the evil may generally be detected in the field by the rapid and premature decaying of the tops, and the smell of rotten potatoes perceptible on walking over the ground. On digging, the affected roots have somewhat the appearance of having been frozen and thawed, though they are not commonly so soft. Sometimes the decay is in spots, and partially covered with a small white fungus or mould."—*New Genesee Farmer, October*, 1844.

A correspondent of the N. E. Farmer, says:

The disease is hardly discernable, in many cases, until after the potato is cooked, when it shows itself in black blotches, like a *rooted fungus*, extending considerably below the surface, readily separating from the potato, which appears as if it had been frozen, and is more or less discolored. In some hills I have found much of the fruit quite rotten, and very offensive to the smell; whilst, in some cases, the same tuber was partially decayed, and the remainder apparently sound.

The Newburyport Herald, speaking of the geographical extent of this disease, says:

"We find that this rot has prevailed in Germany, England, Ireland, Scotland, the United States, and Novia Scotia, for several years; but not until within the two last, does it appear to have been so extensive in the United States, as to excite much interest and anxiety among farmers. Associations of farmers and agricultural chemists in Europe have been busily engaged in investigating the nature of the disease, but have arrived at no satisfactory conclusion. The most plausible opinion, which was first advanced by a distinguished German writer, and which is adopted by the large cultivators in Ireland and Novia Scotia, is, that it is owing to the continual replanting of the same seed; and that, to preserve the potato, new varieties must he frequently produced from the seed."

Now for the cause. We shall present the opinions of Prof. Teschemacher, Boston, Mass., Prof. Emmons, Albany, N. Y. and Dr. Chas. Jackson, all of them eminent as agricultural chemists.

Prof. Emmons says, as reported by *Albany Cultivator*:

Professor Emmons, of the geological survey, remarked, that the disease of the potato, as shown by the microscope, is located in cellular tissue. The starch granules do not appear to be affected at first, nor until the disease has existed for some time. The disease itself is a true gangrene—commencing in the cellular tissue, at numerous points, till finally the whole becomes involved in it. The skin preserves its soundness for a long time after the rest of the potato is destroyed. Three causes may be assigned for this decay: 1. Rapid growth, promoted by high-temperature and much rain just at the period of ripening; 2. Constitutional decay of the seed from age; 3. The nature of the soil, together with late planting. Much evidence was adduced (said Professor Emmons) to show that potatoes upon a clay soil, especially if planted late, were or have been particularly subject to the disease; while those which were planted on a sandy soil, and were ripe when gathered, have not been wholly free from disease. But the experience of the speakers generally on this occasion enforces the position that early planting in a dry, sandy loam, presents the greatest security from future attacks of the disease.

Prof. Techemacher, says: (*N. E. Farmer, Oct.* 1844.)

The appearances which I examined were —1st. A nearly black discoloration of the potato, just below the skin, penetrating one

sixteenth to one-quarter of an inch into the substance, and apparently through the skin, in little black indented tumefications, like pustules. It is probable that in these holes the vegetation of the fungus first begins, and spreads underneath. 2nd. On the surface of the skin, where these pustules were enlarged, there had produced a grayish slimy substance, of a very offensive smell.

The black mass, divided, in a drop of distilled water, exhibited under the microscope a number of long, oval and very irregular-shaped dark bodies, interspersed among the cells of the potato. Many of these cells appeared lacerated; but this might partly have been produced by the mechanical action of dividing, although I think not altogether.—The grayish slimy mass was semi-transparent and indistinct, even when mixed with the distilled water, and exposed to the strongest light I could throw on it.

In order to discover a remedy for this disease, I decided on applying various substances to this fungus, with a view of effecting its decomposition, and examining their action under the microscope. The first application was salt; and the action of this was so instantaneous and decided, that I did not proceed to any other.

A portion of the dark substance was placed on a piece of glass on the microscope stand, in a drop of distilled water, and then thoroughly examined. A little salt, on the fine point of a penknife, was then added. A nearly instantaneous change took place.—The dark-colored masses separated; much of them seemed to pass away; and, instead, there appeared numerous dark, slate-colored globular bodies, which I easily recognized as the spores, or reproducing bodies of the fungus. With the gray slimy substance, the effect was still more striking. All the indistinct slime disappeared, the mass became clear and transparent, and left nothing but these innumerable dark globules floating about in the drop of water.

It seemed to me, then, that the salt destroyed all the vegetation of the fungus,—leaving nothing but the reproducing spores, which are probably indestructible by salt.—The spores of fungi are the bodies by which they are reproduced and spread, and are analogous to the seeds of other vegetables; and these spores are generated in such enormous quantities, that many fungi, like this potato, spread with inconceivable rapidity; but in order to vegetate, they require certain favorable conditions and circumstances, which yet require investigation. These favorable conditions are, in my opinion, prevented by salt, as it destroys the fungus vegetation. Therefore, wherever the disease existed this year, I recommended a liberal supply of salt to be spread on the soil, and trust it will eradicate the evil. It is, at all events, a remedy which cannot do much injury, if it does not succeed.

Dr. Jackson says: (*Alb. Cultivator, Sept.* 1844.)

I find various theories offered, but none of them satisfactory. I have heard the disease of the potato ascribed to the age of the plant reproduced continually from tubers; but this cannot be the fact, for no such distinction can be found in potatoes of various ages and kinds. The yellow, red, pink-eye, and Chenango, have all equally suffered this year.—No peculiarities of soils or of manures appear to afford any explanatien; for the plant appears to have been affected in one as much as another.

If one reads the thousands of articles, American and foreign, upon the theory of this disease, he will understand what "confusion worse confounded" means, and reminds one of the story of a minister who summed up his *fifth* sermon, upon *who Melchisidec was*, by saying: "Finally, my brethren, it appears that nobody knows who Melchisidec was and that it aint any matter!"

New Grapes.

Mr. Lester, late United States Consul at Genoa has brought back to this country a large assortment of the choicest kinds of grape in Southern Europe. They were advertised to be sold on the fourth of July. Mr. Lester spared no pains in selecting, aided by very skillful vinters, and he has brought with him a professional vinedresser, who will, at the sale, give necessary descriptions, &c. It is represented that these kinds have never been before imported to America, and as they come from Piedmont and Savoy, where winters are as rigorous as our own, they may be expected to thrive in their new home.

ORIGINAL CORRESPONDENCE.

For the Indiana Farmer and Gardener.

Enster Beurre Pear.

Mt. Jenner, near Versailles, Indiana, July 8th, 1845.

Dear Sir:—In the last number of the Farmer and Gardener, you inform us that Mr. C. Newhall of Dorchester, Massachusetts, exhibited on 7th June, fine specimens

of the Easter Beurre pear of last year's growth, and that Mr. Ernst and myself, if you recollect right, incline to the belief that it will not do well in the West. It is proper for me to state that this fruit has not as yet, to my knowledge, been tested in the West. The opinion which I gave the State Horticultural Society in reference to it was derived from Mr. Ernst. I have since seen and conversed with that gentleman upon the subject, and find that his opinion was derived from a gentleman in the East, who I suppose had tested it there. If it does well in Massachusetts, I doubt not but it will do well here. If it keeps till June, and is good eating fruit when kept, it is just the thing we want, to complete our list of fine winter pears.

In conclusion, Mr. Editor, permit me to say, that in reference to the Easter Beurre, my situation is like that of yourself on a former occasion, in reference to another member of the pear family, and if the fruit proves as good with us, as it has done with Mr. Newhall, we will just "swing back and tick on the other side," and take pleasure in so doing. Such of your readers as may desire to purchase trees of this fruit, will find the genuine article at the nursery of Mr. Ernst, near Cincinnati, and also, I presume, at that of Mr. Alldredge, near Indianapolis.

Very respectfully yours, &c.,
W. T. S. CORNETT.

P. S. The wheat crop in this county is thought to be rather better than ordinary.
Yours, &c., C.

Mr. Reagan, near Greencastle, can also supply this pear, I presume. It and the Beurre Diel may be regarded as the two best winter pears.—*Ed.*

For the Indiana Farmer and Gardener.

MADISON, July, 1845.

Young Orchards.

Mr. Editor: — If you will mount your horse, and with me ride through Indiana and Ohio, I will show you a great number of small young orchards that were cut off and grafted last spring, and some two-thirds of the grafts are dead, and those that live are so slow in furnishing top for a thrifty root, that even the best of their trees are much injured. Now will you tell all such men that these rains and suns are sending up thrifty shoots, so that the last of August they can put a few buds in each young tree, and then in the spring change the top so gradually that the root will not be injured, and if all the buds should die the tree is not hurt. You may graft in the nursery if you please, but when the young tree is growing in its place, its top should be changed by

Budding.—Bud from a thrifty limb of this year's growth; then cut off most of each leaf, stick the large end in a potato, and after cutting all you need, roll them up in thrifty-growing grass, and if you will change your grass so that it will not heat, you may carry buds for weeks and not injure them so much but they will nearly all live. Immerse some of them in cool water while you are putting in the rest, and be sure to put them in a thrifty branch *of this year's growth.* If exposed to the sun they should be put in the north side, or shaded a few days.

The *plum* early in July, between the time of the first and second growths of the tree; the cherry, about the first of August; apple, the last of August; and the peach the first of September. Do you ask why? Bud in *hard wood before it is hard*: in soft wood as late as the bark will peel perfectly.

I would not stop to take out the wood; you will injure the bud by the process about as much as the very thin piece of wood does, and lose time. EXPERIENCE.

Mr. Experience is welcome; his advice timely and judicious, and the only additional suggestion that we make is, that he take occasion to *bud his* articles a little more frequently on the Farmer and Gardener — and in this kind of budding it is no matter at what season it is done, as the wood and bark are always ready.—*Ed.*

For the Indiana Farmer and Gardener.

The Flock of St. Maries.

Saint Maries is situated forty miles west of Vincennes, in Jasper county, Illinois. It comprises about fifteen thousand acres; part woodland, part prairie, watered by the river Embarras. This fine situation was purchased by Mr. Joseph and Mr. James Picquet, who, with their families and several friends, emigrated from the vicinity of Strasbourg, in France, some years ago. Many families from France and other parts of Europe are now settled in St. Marie, carrying on the mechanical trades usual in western towns, and necessary to an agricultural population.

A long cherished plan of establishing a fine-wooled flock on the lands of St. Marie, is this year being carried into execution by Mr. Joseph Picquet and his friends. To secure a sufficient number of the finest quality of sheep, they purchased thirty individuals from the flock of Mr. Flower, which has long been bred in and acclimated to the prairies of Illinois. They afterwards purchased of Henry Clay of Kentucky his entire flock of pure blooded Saxony sheep. Whilst in Ken-

tucky they visited the proprietors of many fine-wooled flocks, giving liberal prices, for *selected* sheep of fine quality. In the counties of Woodford, Scott, Bourbon and Fayette, were many flocks more or less mixed with the Saxony and merino breeds. From these the preater part of the breeding flock was procured. And eleven hundred of excellent sheep are on their way from Kentucky to Illinois, and will, in a few days, arrive at their point of destination.

The flocks of Kentucky are *not* large, numbering, generally, from 50 to 100. The wool is kept for family use, and is not much made an article of merchandise; therefore great want of uniformity is observable in their various flocks, as well as in the fleeces of the individual sheep of each flock. To add to the discrepancy, a variety of breeds of opposite qualities are often found in the same flock; such as the Cotswold, the Merino, Southdown, and the common native, breeding together in extraordinary confusion. There are some exceptions to this rule. Col. Wm. Hart, near Versailles, has a pure blooded flock of merinos of about six hundred, and he has lately procured three rams from Mr. Collins' Rambouillet merinos. The fleeces of Mr. Hart's flock are heavy, but not very fine in fibre.

Great injury is sustained from the depredations of dogs in Kentucky. Mr. Clay would not have parted with the fine flock, which has for so many years graced the park of Ashland, but for the continued loss and injury sustained by dogs. The small flocks of Kentucky lying in their large bluegrass fields, are in high condition, many of them too fat for stock sheep. Not being often handled, they are exceedingly wild. They are left like deer to run in the bluegrass pasture from year to year, only taken up once a year, to shear and turn loose again.

The sheep thus collected in Kentucky will miss their abundant and shady pastures, and with all the care that can be given to them, will suffer in some degree from the effects of the journey and change of habits and pasture.

If the location proves favorable, and great care and attention is given during the ensuing year, the flock of St. Marie may prove beneficial to its owners, and, ultimately become, from its permanence and extent, an enduring source of wealth to the State.

Although every new enterprise in our State may be hailed with satisfaction, it is from the report of the *second* year that the character of success or failure is to be ascertained.

F.

For the Indiana Farmer and Gardener.

The American Poulterer's Companion.

Will you inform your readers that the American Poulterer's Companion, by C. N. Bement, can be procured at Moore's book-store on Main street, between third and fourth, Cincinnati, and that any man who keeps poultry on a large or small scale, may be greatly assisted by its common-sense information.

L.

For the Indiana Farmer and Gardener.

Fresh Eggs in Winter.

As you are giving light, will you tell your readers how they can have fresh eggs in the winter. They may have them in either of two ways. In September let them purchase as many fresh eggs as they wish to use in the winter, pack them in kegs or stone jars, setting them all upon the little end. Take unslacked lime and slack it in so much water as will fill your jars or kegs. Let there be lime enough to make the liquid a little thicker than milk. When it is cool, pour it in upon your eggs, and set the jars in a cool place and you have nothing more to do than to take out your eggs as you want to use them. They say a little salt is good, but I have kept them from August till April, and never found one to be injured, only as the lime will settle about the lower tiers, so as to destroy the shell, unless you have something else than eggs at the bottom of the jars.

The second plan is to select chickens hatched as early as April (for old hens or young chickens will not, generally, begin to lay till the last of January.) *Feed them well*; give them *clean water*, and *gravel, lime*, or *pounded bones*, a good place of *dry earth* to burrow in, and, not least, a *warm place* where they can shelter themselves night or day, from cold or wet. After years' experience I have never failed once of fresh eggs in winter bn this last plan. I can say, too, from experience, that if you will get the Poland or the Creole breeds, you will have twice as many eggs during the year, and more than twice as many in winter. Another most fundamental doctrine is, *to exchange your stock every year*. Whether your readers will try these plans or not, I cannot tell; but they are sent by one whose family has fresh eggs the whole year.

Henry Micron.

For the Indiana Farmer and Gardener.

Madison, July, 1845.

Pompone Peach.

We have a pretty fair yield of the pompone peach this year, while all other varieties except a few very worthless seedlings are killed. It is a delicious, beautiful, freestone peach of middle size; ripens about midway between the New York rare ripe and

Kenrick's heath. They may all be wormy or fall off yet, but it is a pleasant sight to look at them when all other trees are fruitless.

They blossomed so late that the first freeze which killed most of the other peaches did not injure these at all. The blossom is beautiful, and twice as large as ordinary peach blossoms, and leaves about the peach a protection much better than the other peaches had when the second freeze killed all but this variety.

A Lover of Peaches.

Western Shepherd.

Revised by the Author, for the Indiana Far. and Gard.

The first part of this article should have appeared in our last number, and is connected with the portion there printed. It was was left over by mistake.—*Ed.*

About twenty-five years ago, the Merino sheep were imported, and spread over the States of Ohio, Indiana, and Kentucky, in small numbers, and their propagation was attended to for some time with much zeal. But as soon as the extravagant prices, to which this species of sheep and wool had attained, decreased, they were neglected and abandoned, and all that now remains of them is to be found in a mixture of breed in a portion of the common flocks of Kentucky. The merino speculation was then engendered as the Morus Multicaulis has been since, and both were abandoned for the same reason.—On enquiry for the Merinoes of Kentucky, you are told that the breed has run out; that the soil and climate did not suit them. It is very true that the breed has run out, but it is very important to ascertain the cause of the failure. It is not that the soil and climate of Kentucky are inimical to the growth of fine wool. Many of the little flocks fell into the hands of speculators, who abandoned them as soon as the speculation ceased. Others were kept by amateur breeders, unacquainted with the art of keeping up or improving the breed of any animals. They bred from all they had; and, tempted by a little advance in price, sold, of the males, all they bred; the inferior as well as the good ones, and thus a constant and rapid deterioration took place. A farmer would sometimes purchase a buck, of moderate quality, to run with his common sheep; and, from his notions of economy, often bred from his progeny. The practice of purchasing sheep in pairs, with an expectation of attaining, thereby, a progeny, excellent of their kind, is fallacious. No choice or selection can be made. Kentucky had no well selected flock of pure blooded animals, kept in sufficient number, to afford an annual supply of good Rams, until the breed was established in the country. It must ever be borne in mind that, to sustain and improve any breed, it is not enough to acquire animals of the pure breed, but they must be excellent of their kind. An ordinary male, of an imported breed, may be advantageously used to improve the common stock, but that animal could never be made use of to improve the race from which he sprang.

A large fine wooled flock, under the management of Mr. Dickens, of Steubenville, Ohio, gave a very different result. There the parties owning the flock, owning, also, a manufactory, had a direct interest in the improvement of the fleece. Their practice was on a sufficient scale, and continued with a consistent course, for many years. Complete success attended the business of fine wool growing; and from this flock several fine wooled flocks, that are now successfully kept in Ohio, sprang.

The history of my own flock, kept in the southern part of Illinois, is favorable to the fine wooled breed. They are from the Merinoes of Spain, procured just before the French overrun the country. Sir Charles Stewart, the English Ambassador, purchased the royal flock. He shipped them, after a hurried drive scarcely out of the reach of the pursuing enemy, some hundred of miles. Six thousand, only, reached the shores of England; and, after the lapse of a year, two thousand sound Sheep arrived.—These were purchased by my father. The first year's clip sold readily for one dollar per pound in the grease, amounting to ten thousand dollars. This was then thought to be a low price; wool, once, during the war, about three years previous, having attained the enormous price of five dollars per pound. Some additions were afterwards made from the paula and escurial flocks.—When I emigrated to this country, in 1817, I brought with me six of the finest animals of the wool-bearing species ever brought to this country. This is the origin of my flock; they have been kept in the same district, and on the same farm, where I now reside, ever since.

No deterioration in wool has taken place; on the contrary, the wool fibre of them is somewhat finer. Eighty ewes, purchased of Mr. Beecher, of Lancaster, Ohio, formerly from the Steubenville stock, has been the only addition to the pure bred stock. The excellence of my wool is not only to be attributed to the fineness of the original stock, but to the continued selection of males, with the finest wool. This flock has never been pampered, but has been kept hardily in a way that any farmer may keep them. They

go out on the prairie in April, and live upon the prairie grass till October, or until it is dry and harsh. They are then brought into the enclosed pastures, and, as winter advances, they are fed night and morning with Hay, and a few sheaf oats, or small portion of shelled corn, say half pint to each Sheep. The flock is now completely acclimated, and may be said, after a twenty years' domici, to be a native Illinois breed. Since I have owned them there is a change for the better in the constitution and fatting qualities of these sheep. When they first came from Spain the ewes were accounted bad mothers; and many were of tender constitution. Now, from attention to these points in so long a course of breeding, the ewes are excellent mothers, and the fattest sheep is found to have the finest fleece. They are decidedly hardier than the common sheep. These facts show that fine wooled sheep are adapted to the soil and climate of Illinois, and that they may be kept without any fear of degeneracy in wool or carcase.

Of the large framed long wooled sheep of England we have had less decided experience. yet some may be gathered (imperfect as it is) useful and important. I brought from England, with the merinoes, two Bakewell and two Lincolnshire rams; and four ewes, two rams, and two ewes, died on the passage. One ram, run over by a reckless stage driver in Jersey, had all four of his legs broken. One arrived in Illinois, but was killed by a wolf before reaching my house. Two ewes of the Bakewell breed came safely. One of these died the first Winter, From this one ewe, with my fine wooled bucks, a strain of sheep are yet observable, with deep chests, short legs and broad backs, with great aptitude to fatten. From the same cross upon common sheep, many of the progeny are defective in shape, though with a fleece of equal fineness.

About fourteen years ago Mr. William Pickering imported a beautiful lot of Bakewell and Lincolnshire rams and ewes; but, from untoward circumstances and accidents these sheep have not succeeded, and their breed is almost lost; not, however, before a valuable cross has been obtained by the use of half blooded rams, with common fleeces. Thus an improved breed of coarse wooled sheep has been secured in the neighborhood. But the fleeces of these sheep, parents and progeny, do not weigh, as they did in England. The failure of the long wooled sheep must not be considered final, it may require two or three experiments to test the results. It requires great patience and perseverance to acclimate both plants and animals; and many trials, by due perseverance, may terminate in success. An instance of this kind occurred with the vegetable kingdom. The Windsor Bean shrunk under the influence of the hot sun of this country for some years, and produced little or nothing. The plant is now acclimated, and it produces almost as well as it did in England. It is admitted that our hot sun afflicts large and fat sheep with loose open fleeces, and its scorching rays dry up the pasture in the autumn, upon which their weight of fleece greatly depends. There is a fitness of the breed to the locality that should not be lost sight of. The merino, used to the warm sun of Spain, suffers nothing from change of climate, and his thick and greasy fleece shelters him more effectually from the sunshine and rain, than coarse open wool can do. This single fact may account for the superior hardiness of the merino and its crosses. Dry and rolling lands for fine wool; rich low land for coarse and heavy fleeces.

We should not be influenced, in our preference of breed, altogether by the opinion and practises of the English breeders; for the data on which the judgment rests is various in the two countries. In England, mutton is the article of first importance, and wool the secondary. In America, wool is first and mutton second. The flock which produces the most valuable fleece is the flock that pays the Western Farmer the best. To choose aright that flock, to keep it well, and propagate it rapidly, is our decided interest.

Calculations and cautions. On the management of a flock in the natural prairie, before cultivated grasses are provided on the farm. The proper management of the prairie to prolong the pasturage fresh and young till winter sets in.

To assist the farmer in his choice of breed, the following calculations, and information, may be useful. In estimating the keep for a fine-wooled flock, ten sheep are supposed to consume as much as one cow. A ton of good hay, and ten bushels of corn, will winter ten fine-wooled sheep. If they be ewes the calculation will stand thus:

On ten ewes of the pure breed.

Dr.		Cr.	
A ton of hay	$4 00	10 lambs at $2 each	$20 00
10 bushels corn	2 50	10 fleeces at 2¼ lbs. each at 50 cts. per lb.	11 25
Shepherding at 37½ cts. per head,	3 75		
	10 25		
Profit	21 00		
	31 25		31 25

Ten common ewes with a merino ram.

Same keep and shepherding as the pure bred ewes	$10 25	10 lambs at $1 50	$15 00
Profit	14 12½	10 fleeces 2½ lb. each, at 37½ c. p. lb.	9 37½
	24 37½		24 37½

Ten ewes, common breed.

To same keep and shepherding	$10 25	10 lambs at $1 each	10 00
Profit	5 37½	10 fleeces 2½ lbs. each at 25 c. p'r lb.	5 62½
	15 62½		15 62½

Ten pure fat wethers.

1 ton of hay	$4 00	10 fleeces 4 lbs. each. at 50 cts. per lb.	$20 00
20 bush. corn	5 00		
Shepherding	3 75		
Price 10 lambs	20 00	10 fat wethers to butcher at $3 each	30 00
	32 75		
Profit	17 25		
	50 00		50 00

Ten stock wethers, pure breed.

1 ton of hay	$4 00	10 fleeces 3 lbs. each, at 50 cts. per lb.	15 00
Shepherding	3 75		
Profit	7 25		
	15 00		15 00

Ten stock wethers, common breed.

1 ton of hay	$4 00	10 fleeces 3 lbs. each, at 25 cts. per lb.	7 50
Shepherding	3 75	Loss	25
	7 75		7 75

Common cow for stock breeding.

1 ton of hay	$4 00	1 yearling	$4 00
Herding	25	Loss	25
	4 25		4 25

The weight, per fleece, is taken from the average of my whole flock; a few sheep, particularly kept, would yield a greater weight of fleece. In this country the average is reduced from the mixed ages kept in the same flock. The price of pure-blooded wool is moderate. I have sold more frequently for sixty-two and a half cents than for fifty cents, and two or three times for seventy-five cents; once for forty, and once for thirty-two. Few would like to part with their pure-blooded lambs for two dollars. Hay and corn are also at their usual prices. This very year I sold my wool for fifty cents per pound, and Judge Wilson's first, second, and third cross taken together, at forty cents per pound. Testimony from unquestionable authority, and from an entirely different source, has just appeared, showing the great advantage derived from crossing the Bakewell sheep, in England, with the merinoes. As the whole article is interesting to breeders, I will give the whole extract. "In John Lawrence's valuable treatise on cattle, there is a highly interesting account of the cross between the merino and the Bakewell sheep, which appears worth our serious regard. It is now pretty generally conceded that the grand secret of crossing is to commence with dam the best. Among the breeders of Europe, more care is observed in the selection of the male, as to the form and constitution, than the size. Indeed, the preference is given to a small male, when compared with the size of the female. Among the breeders of pure Devon cattle, but little regard is paid to the size of the bull; his points and purity of blood are the objects for which they seek, in rearing large oxen: always choosing, as a matter of the first importance, a cow of large size and capacity for breeding."

In page 591, of Lawrence's treatise, it is said, that "Mr. Hose, a considerable grazier, at Melton Mowbray, has crossed several of his Bakewell or Dishley ewes, with a merino ram, with decisive success. I lately requested this gentleman to send me a few fleeces of the wool, which I put into the hands of Mr. Hawksley, enquiring what is the present value of such wool? His answer was, 'We will give eighteen pence per pound for two thousand packages to-morrow, and take a hundred packages weekly, by contract, at the same price, for seven years certain.' Now, this price is nearly twice as much as can at present be obtained for pure Bakewell wool; and these sheep produce little more than the merino Dishleys, for, although the merino shortens the staple, he thickens the pile so that every fleece is nearly double in value. The loss we are to look for, then, is in the carcase, and this is infinitely less than will at first be supposed. It seems indeed to be now very generally agreed, that in sheep the sire operates principally upon the fleece, and the dam on the carcase, which is illustrated by Mr. Hose's merino Dishleys, they being superior in form to any I ever saw with Spanish blood in their veins, and having lost little, if any, in size. Many of the Bakewell breeders have their whole wool for three years on hand; whereas, Mr. Hawksley's lot seems clearly to prove that one cross with the pure merino would make their wool immediately saleable at a great advance in price for seven years to come, while no deterioration would have taken place in the carcase." Law-

rence adds: "The loss of size of the merino Dishley's cross is the natural result, perfectly independent of the idea of deterioration; and as to the flesh, nothing can be better calculated than the Spanish mixture to remove the natural insipidity of Bakewell mutton."

On the subject of the deterioration of the wool, by crossing, and the impossibility of preserving its fineness out of Spain, Lawrence observes: "I lately exposed the following patterns of cloths to one who ought to be as capable a judge of cloths as any in England, and who was formerly convinced of the utter impossibility of growing fine wool in this country. No. 1, given me by himself, as the finest pattern of cloth, two years since, that London could produce, and made from imported Spanish wool. No. 2, Lord Somerville's cloth, manufactured, I believe, in 1836. No. 3, a late very beautiful pattern of Dr. Parry's merino Ryland cloth. The judge instantly threw away No. 1, as unworthy to stand in competition, giving the preference to Dr. Parry's specimen; but, on final examination, thought Lord Somerville's somewhat the finest, and the fabric most substantial, the other wearing the face of a beautiful ladies' cloth, in appearance like those made of Saxon wool." With regard to the flavor of merino mutton, Lawrence says: "I have never heard any man complai of the quality of *Spanish* mutton, but *he who never tasted it*." Here is abundant evidence both at home and abroad of the great advantage in crossing the coarse-wooled breeds of this country, as well as those of England, with the fine-wooled breed of Spain, with a view to produce an article for sale and export.

Equal benefit is derived, in the domestic manufacture, in the use of fine wool. A great prejudice exists with the back-woods farmer against the use of fine wool in their linseys and jeans. But the preference to coarse wool is founded in great error, and works much to their disadvantage. They like coarse wool because they have been used to it, and the carding machines of the country are adapted to the bad wool it produces. The objection of the carder to the fine wool is, that when it is brought to him, after being washed in the way that the women do the common wool, it is full of knots and kinks. This is in consequence of the easy fulling quality in fine wool, it will not bear the least rubbing; but if washed, as I have directed, hereafter, it is as free to work as coarse wool. But, in the wear of the cloth, there is no comparison. The domestic cloth made from fine wool, in many cases, wears as long again, and in all cases, half as long again as the cloth made from coarse wool. Many of the neighboring women, who had the strongest prejudice against fine wool, after trial now, always prefer it to the coarse. I will give the testimony of a neighboring female, who is in the constant habit of making her husband's woollen garments. A neighboring female enquired of my wife for some fine wool. Upon asking what difference she found in the wear of the fine wool to the coarse, she replied, "It makes just this difference: 'When I make my husband clothes from the coarse wool, two suits last him a year. When I make them of fine wool, three suits last him two years," The wool she spoke of as fine wool was half-blood or grade-wool. Those who desire to lighten the labor of their wives commit a great mistake in giving them coarse wool to make into clothes.

Judge Wilson's grade-wool made forty per cent. more in price than the common wool. The clothes made from the grade-wool gave forty per cent. more of wear than those from common wool. I have seen it frequently asserted in print, and believe it to be true, that, for all purposes for which wool is used, that fine wool is better than coarse wool. It will make a cloth more supple, even, and durable, and far more sightly. Socks and stockings, made from the wool, wash soft, and are pleasant to wear to the last. Nothing can be more disagreeable or more expensive than the use of coarse wool in socks.

A glance must be now taken at the difficulties and risks, to which flocks are exposed in new countries, and which have hitherto retarded their rapid increase upon any large scale. The principal difficulties are from the habits of the people, the existence of the *wolf*, and some cases of total loss of a flock newly brought into the State, from some cause not sufficiently known. The hunter and the corn-farmer, the first settlers in new countries, can keep hogs and cattle in the range without giving much time to their care or protection. To be sure the wolf farms the pigs on shares with them, and if he takes much over half, a rifle ball squares accounts. So long as the back-woodsman gets pork enough "to do him" it is all he cares for. The constant care and daily watchfulness, that sheep require, is utterly repugnant to his irregular habits of exertion and indolence. It must be another sort of people to keep sheep: men, possessed of some capital, care, method, and industry. The wolf is a great drawback on the pleasure and profit of sheep keeping. It is not only what the beast destroys, nor from the loss sustained in the expense of watching against his attacks. But the great loss sustained is in being obliged to pen the sheep, every night, for safe keeping. Every sheep

would pay its owner at least half a dollar per head per annum more than it now does if it could be suffered to lie at rest in its pasture instead of being penned in a yard. A tax for the destruction of wolves would be complained of by many of the settlers, who are now taxed half a dollar a head on every sheep they own for tolerating them. The great loss of property, by wolves, is a State loss, and the State should destroy them. Deaths, from unknown causes, have swept whole flocks, newly brought to the State, which tends to damp similar enterprises. Many sheep are purchased from drovers; they have mostly been over-driven. This lays the foundation of disease. From whatever cause it may arise, *if the sheep are poor in the fall of the year, great loss will accrue to the owner.* The dry mild weather in autumn is often accompanied with scanty herbage, and sheep are rapidly declining unobserved; the growth of wool conceals their poverty from an unpracticed eye, and a mortal stroke is inflicted before the owner suspects a loss. It is a great point to procure sheep from healthy and acclimated flocks, if possible. When they are brought from a distance, care should be taken that they are not over driven. Twelve or fifteen miles a day is far enough; but whether they travel few or many, they should never be urged beyond their naturally slow pace. It behooves the farmer to see that he has abundance of nutritious food on their arrival at their journey's end. Keeping sheep of all ages in a flock, in a pasture barely sufficient for them, destroys the young and the old. The strong robust sheep eat up all the food. In winter feeding, not allowing sufficient trough and rack room for all the sheep to feed at once, and easily, without jostling each other, starves the weakest. These are some of the known causes of failure, and, lest there should be others of a local nature, I should advise every new beginner to be moderate in the number of his flock the first year, although he may incur an additional charge for shepherding. Two or three hundred is enough for the ewe flock. G. FLOWER.

Haying.

Haying is pretty work, clean and inviting, and we are accustomed to labor rather harder than in other branches of farming. Mowing, raking, and pitching require much sinew, yet something besides main strength is essential to excellence in each of these labors. A sharp tool is more necessary for mowing than for chopping wood, and he who has a good faculty of holding his scythe, on the stone, and the rifle or whetstone on his scythe, has much the advantage over an unskilful sharpener of the tool.

There is no mathematical rule for determining how thin the edge of the scythe should be made, to work to the best advantage. If you make the edge too thin it will be more injured by contact with harder substances than when rounded more or made more stunt. Something depends on the kind of grass that you are cutting—something on the smoothness of the field, its freedom from stones and bushes. And for the plainest fields you will not always find it an easy matter to form the edge precisely right.

If you grind too close you may turn the edge and leave your tool more dull than if you grind less. It requires a good head, if not a good eye, to grind a scythe nicely.—But we have seen farmers whose judgment was so good that they could form a good edge without spectacles, though they could not read without them.

Many farmers fail in attempting to put on a good edge with the whetstone. Skill in the use of this is as important as in grinding. If you draw too close across the edge you wear it away and your tool will not be keen. We have seen laborers draw the whetstone across the under side while the upper was scarcely touched. This is a common fault. We think that many err in attempting to make the edge too thin; it will not stand long enough for effective service.

When the tool has just been ground the whetstone or rifle should touch the edge lightly. It is well to have a coarse whetstone in the field to use when the edge has become quite rounded, and to rub out batters from stones or other hard substances that you may find in your swath.

When the weather is not promising it is excusable to make short swaths; but if you would have a good forenoon's work done you must go round a large piece, or make long swaths. No man will earn wages by cutting short swaths and travelling back to begin. He may look up to the sun often enough to satisfy himself as to his course, but he must learn to mow east, west, north, and south, or he will not perform a good forenoon's work.

We have seen printed rules for haying to which we cannot assent. We have been advised to begin mowing quite early, while it is cool, and to lie by in the heat of the day while the hay is drying. This seems rather too much in the teeth of an ancient maxim, "make hay while the sun shines." He who would make his hay rapidly and well must be about it in the middle of the day, even though the weather is so warm as to cause rapid perspiration.

From ten o'clock A. M. to five P. M. he must watch the weather and keep his hay stirring. A nap at noon, in hay time, is entirely out of place. It would be safer to

drop to sleep at six o'clock. A farmer of judgment and of attentive habits will lose but very little hay by wetting. He will watch the clouds from ten till his hay is in the barn, or in cocks that are well trimmed.

Showers in the middle of the day are very troublesome, but their bad effects may be avoided by skillful management. When you are threatened with rain strive rather to get your dryest hay into heaps than to cart it to the barn, for in this way you will generally secure twice as much as you will with cart and oxen. Never mind small scatterings when you have not time enough to secure the whole. Look to the main chance. Collect the main body in heaps that will turn the rain, and the hundred pounds of scatterings will hardly be noticed in your mow mixed with a ton of bright hay.

To some it may appear trifling to be thus particular; but we have seen farmers of good judgment in other matters act quite absurdly through mere habit. They have early been taught "to rake clean"–perfectly clean; and they observe this rule in extreme cases, not considering that when all is threatened with destruction they should abandon what is less valuable for what is more worthy of attention.

These men will laugh at the absurdity of the diary woman, who, when the house was on fire, made it her first business to remove the pans of milk from the cellar and to set them in a place of security while the most valuable furniture was going to destruction.

A farmer who uses a horse rake has greatly the advantage of one who gathers all his hay by hand labor. A whole afternoon is spent in raking a single acre, though with a horse and small boy thirty minutes are enough.—*Mass. Ploughman.*

On Stocks for Fruit Trees.

In a previous article we condemned the practice of employing suckers for stocks, in raising fruit trees. We will now endeavor to suggest a course that will be far more successful in its results.

The CHERRY, being one of the most difficult of our fruit trees to rear, will secure the first attention.

Seed.—The pits or stones of the fine cultivated varieties do not usually fill out with plump meats, and therefore cannot be relied upon for starting a bed of seedlings. To this remark the Graffion or Yellow Spanish and a few others are exceptions, the Yellow Spanish especially, in our hands has always vegetated freely and afforded not only the best of stocks but has produced several good new varieties. The pits of the Mazzard and the Morello are generally employed, the former for the Heart varieties, the latter for the Dukes. The Hearts will take and flourish on Morello stocks but will out grow the stocks so much as to present an insignificant appearance. If it be desirable to dwarf our trees, the Bird Cherry, a native of our woods may be employed. The fine varieties will take upon it and bear well for a few years but we think will not be long lived. The Bird Cherry *Cerásus Pennsylvánica*, described by Torrey & Gray, and not the wild black cherry *Cerásus serotina*, described by the same authors. The finer varieties will take by budding and engrafting on the latter species but we have never known them to survive more than a year or two and we have concluded that there is something uncongenial in the stock that will prevent its being successfully employed for that purpose. The Mazzards when they can be obtained, should take the preference to all others.

Preserving the Stones.—When the fruit is fully ripe the stones, freed from the flesh, *but still moist*, should be mixed in a box with garden soil and placed in the earth in some safe and shady situation, where they can be covered with flat stone that will conceal them from rats, mice and squirrels. It is necessary that they should be kept moderately moist from the moment they are separated from the pulp till they are sown in the seed-beds, and that they should be buried so superficially that they will be acted on by the frost during the winter. If they become dry very few can vegetate. If the box be placed too deep in the earth the frost will not crack the pits and many will fail to grow the ensuing year. If left uncovered except by earth the deposite will be unceremoniously removed by small quadrupeds. A plank or board cover is apt to warp and leave openings for the depredators, therefore a thin flat stone is to be preferred. The north side of a building or tight board fence is the best situation in which to place them. Under the shade of trees they do not obtain a sufficient supply of moisture, and in dry seasons it is best occasionally to furnish them with water.

Seed-Beds.—At the earliest approach of spring select a suitable location and prepare the seed-beds. Inattention to the character of the location, is one of the most frequent causes of failure in raising the Cherry. If the seeds are sown in a soil that has been improved several years for a garden or under active cultivation, the young plants are sure to be cut down by ants, worms or other insects. There are two situations which may be selected for this purpose:

First, the north side of a fence or building especially of a barn or a stable where the soil is very rich and abounds with animal matter, but has not been under cultivation for several years. *Preparation.* The ground

must be thoroughly dug or pulverized with a spade and rake and thrown into narrow beds so as to discharge all surplus water. The surface should be dressed with a thin coat of coal or leached ashes.

Second, a rich moist and sandy piece of turf ground that has not been plowed for many years may be selected for the seed-bed.—It should be carefully turned over in narrow furrows so as to cover all the grass, then pressed down with a heavy roller and finally dragged till the surface is rendered mellow. Over this should be spread a dressing of coal or leached ashes and plaster of paris.

Sowing the Seeds.—The surface of these beds should be marked off into trenches eight inches wide, three deep and eighteen apart. This is best performed by drawing, along a garden line, a hoe of suitable width. The pits should be spread over the surface of these trenches, at about one inch from each other, and then covered with light mould.—If the weather should be dry, it is best to tread down or roll the surface after the pits have been covered.

In favorable seasons, the seeds will soon show themselves above the surface of the ground, and will grow with great rapidity, requiring no care except repeated hoeing and weeding; but as it frequently happens that droughts, frosts, or scorching suns in the spring, occur, that will destroy the tender plants, it is the safest practice to cover the rows as soon as sown, with limbs of spruce pine, brush, and dry leaves or boards set upon an edge. This protection should be continued till the plants have attained sufficient maturity to resist these unfavorable agents.

If the sowing of the pits be deferred until they have sprouted more than half an inch in length, most of them will die. If sown in the trenches in autumn, they are liable to be stolen by mice and other vermin, and the ground is also apt to become baked and hard to a degree that will prevent them from growing through the surface.

During the present most unpropitious season, we have raised a fine bed of seedling mazzards, on a piece of turf prepared in the month of March, without employing any modes of protecting the young plants. At the approach of the ensuing winter it is the safer way to take up the young trees which will have attained the height of one or two feet, and to lay them down by the roots in a trench and protect them from the impression of frost.

Their subsequent management in the nursery we may have occasion to refer to in some other article. We would recapitulate by saying that the art of raising good cherry stocks consists:—

1st. In selecting stones of the mazzard and other suitable varieties, that are first matured.

2nd. In preserving them during the autumn and winter in a moderately moist condition, where they will be acted on by frost.

3d. In selecting a seed bed of fresh soil, that has not been tilled for many years, and that abounds with abundance of decaying vegetable and animal matter.

4th. In sowing the stones early in the spring before the radicles have taken a considerable growth.—*W. R. Hort. Mag.*

J. P. KIRTLAND.

From the (Albany) Cultivator.

Gestation of Cows.

MR. EDITOR.—While living on my farm, I found it not only useful, but very necessary, to keep a record of the time my cows were put to the bull, as the time of calving. By the means of keeping a record, I was enabled to make a calculation on the probable period parturition would take place, and be prepared for the event, and avoid accidents which might occur, when no attention was paid to the subject.

The experiments and facts which I am about to state, may not be considered of much importance to farmers generally, but to the breeders of cattle, and the inquiring mind, they may, I trust, be interesting; and some good may possibly result from their publicity.

Earl Spencer, in a paper communicated to the "Journal of the Royal Agricultural Society of England," says the shortest period of gestation, at which a live calf was produced, was 220 days; and the longest 313—difference 93 days.

M. Tessier, in a memoir read to the Royal Academy of Sciences at Paris, says that in 1,131 cows, which he had the opportunity of observing, the shortest period of gestation was 240 days; and the longest 321—difference 81 days.

Both of the foregoing statements differ from my experience. Among my cows, though numbering only 62, the shortest period of gestation was 213 days, and the longest period was 336—difference 123 days.—But as regards the shortest period of 213 days, I must confess I have had my doubts as to the correctness, though I kept the record myself, for in no other instance have they fallen below 260 days.

It would appear from the Earl's statements, that a calf produced at an earlier period than 260 days, must be considered decidedly premature; and any calf produced at any period of gestation exceeding 300 days must also be considered irregular, but in this latter case the health of the produced is not affected.

There are some facts presented in my record which differ from any statements which

have fallen under my observation. For instance, in 1839 I had fourteen cows, three of which produced heifer calves; and the period of gestation averaging 284 days, while the other seven produced males, and averaged 280 days. This, in regard to the time allowed for males and females, is contrary to the prevalent belief among farmers and differs very materially from the result of the following year, 1840. I had that year thirteen cows, six of which produced heifer calves, whose period of gestation averaged 278 days; and seven produced bull calves, averaging 299 days; the shortest period of the heifer calves was 213 days, and the longest 336 days; being the greatest extremes of of either year. The shortest period of the bulls was 278, and the longest period was 289 days. In this year the number of males and females were nearly balanced.

The next year, 1841, eleven cows produced eight heifer and three bull calves. The shortest period of gestation for the former was 277 and the longest 292 days—averaging 286 days. For the bull calves the shortest period of gestation was 284, and the longest 299 days—averaging 293 days.

In 1842, the order seemed to be reversed; for out of thirteen cows, nine produced males, and four females. The shortest for the males was 281, and the longest 294, averaging 287 days. There was but very little difference in the time for the females; the shortest period being 280, and the longest 286—averaging 284 days.

In 1843, the proportion of males to females, was as in 1840, nearly balanced. From eleven cows, six male and five female calves were produced. The shortest period for the males was 277, and the longest 290—averaging 282 days; and the shortest period for the females was 276, the longest 286—averaging 282 days.

In the five years, which embraced my experiments, sixty-two cows produced twenty-six females, and thirty-six male calves; the period of gestation for the bull calves, averaging 288 days, while the heifers averaged nearly 283 days.

In the experiments of Earl Spencer, those cows whose period exceeded 286 days, the number of females was only 90, while the number of males was 150. Now, in my experiments, those cows that exceeded 286 days, the number of females was 7, while that of the males was 12. The number of female calves produced under 283 days was 24, while that of the males was 31. In most cases, therefore, 283 or 288 days may be assumed as the usual period for gestation, and not 270 days, as stated in Youatt's work on cattle.

My experiments were not confined to any particular breed or variety of cattle—they consisted of Durham, Devon, Herefords, Ayrshires and grades; and I think these results, though derived from observation of one person only, will be found equally applicable; at any rate, we should be pleased to hear the results of others. C. N. BEMENT.

American Hotel, Albany, July, 1845.

The following *recipe* is said to be a sovereign cure for bed-bugs:

Take a quantity of *whale oil*, and about the same quantity of lard or tallow, simmer them a few minutes together. so as they will mix. Apply the mixture with a feather or fine brush to the crevices and joints of the bedsteads and these vermin will not only desert the bed but leave the room.

"NEW SECRET SOCIETIES.—The rumsellers in Massachusetts are forming themselves into secret societies, called lodges, for the better enjoyment of the privileges which God has given them. One has been established at Plymouth, with a sign which shall be revealed to each member, but shall be kept secret and no member shall reveal it."

We will venture that there is one 'member' that will reveal the sign of rum-sellers in spite of the most solemn oaths, and that is the nose. This treacherous member has a perverse inclination to 'let its light shine.'

Ed.

CELERY FOR DUCKS.—A writer in the Buffalo National Pilot says: "The common duck of the poultry yard, if fed (while fattening) copiously upon the tops of the celery plant, will attain a juiciness and a flavor that must call forth unqualified approbation from every epicure. It is the wild celery plant that gives peculiarity of enchantment to the canvass back, and the common celery top will add a charm to the duck of the yard, that cannot be conceived. You cannot make a tame bird equal one with the wild flavor of freedom and foreign travel, but still you can refine on poultry."

RECIPES FOR HOUSEKEEPERS.—*Preserving Vinegar for Domestic Purposes.*—Cork it up in glass bottles, then put them in a pan with cold water, and as much hay or straw as will prevent them from knocking together; after which, set the pan over a brisk fire, and when the water nearly boils, take off the pan and let the bottles remain a quarter of an hour. Vinegar thus prepared never loses its virtue, and is peculiarly suitable for pickles.